

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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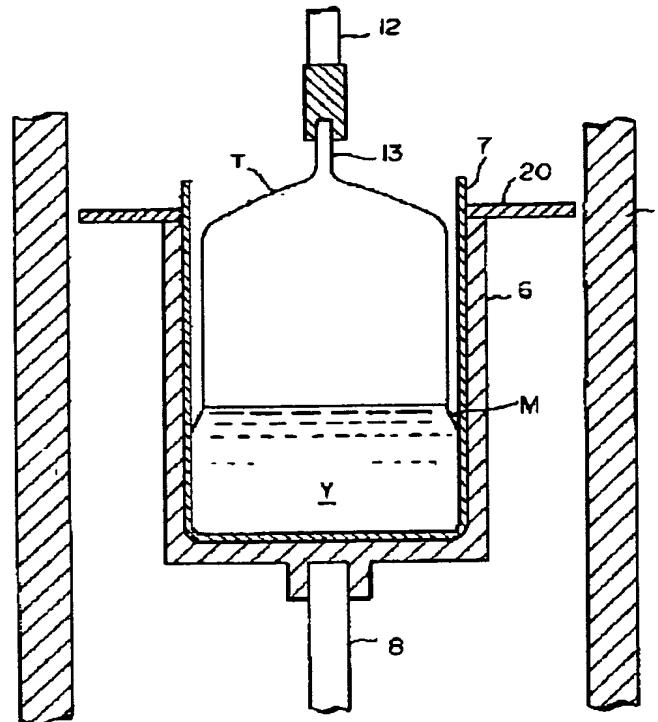
APPLICATION DATE : 09-09-91  
APPLICATION NUMBER : 03229132

APPLICANT : RES DEV CORP OF JAPAN;

INVENTOR : SHIRATA TAKAHARU;

INT.CL. : C30B 15/10

TITLE : SINGLE CRYSTAL PULLING UP  
DEVICE



ABSTRACT : PURPOSE: To obtain the single crystal which has high cylindricity and dislocation defects by generating a positive temp. gradient outwardly in a radial direction atop the melt in a crucible, thereby improving the effect of controlling the crystal shape by meniscus.

CONSTITUTION: This device has a cylindrical hermetic vessel 1 which is hermetically sealed in the inside space, the crucible 7 which is disposed in the hermetic vessel, a susceptor 6 which holds this crucible 6, a crucible rotating means 8 which rotates this susceptor 6, a heating means which heats the hermetic vessel 1, and a pulling-up mechanism 12 which immerses a seed crystal into the raw material melt Y in the crucible 7 and pulls up the single crystal T. A toric collar part 20 for shielding which extends outwardly in the radial direction and has the outside diameter smaller than the inside diameter of the hermetic vessel 1 is provided in the susceptor 6.

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